

WHAT IS CLAIMED IS:

1. A cleaning apparatus for cleaning a substrate, comprising:

a cleaning member;

a cleaning member carrier for holding the cleaning member and bringing the cleaning member into contact with a substrate to be cleaned; and

a sensor for detecting a presence/absence of a cleaning member held by the cleaning member carrier.
2. A cleaning apparatus as set forth in claim 1, further comprising a substrate holding device for holding the substrate, the cleaning member carrier is movable between a cleaning position where the cleaning member is brought into contact with the substrate held by the substrate holding device and a retracted position where the cleaning member is out of contact with the substrate.
3. A cleaning apparatus as set forth in claim 2, wherein the sensor is provided at the retracted position to detect a presence/absence of the cleaning member held by the cleaning member carrier positioned at the retracted position.
4. A cleaning apparatus as set forth in claim 3, wherein the cleaning carrier comprises a cleaning member holder, the sensor comprises a light emitter for emitting light towards the cleaning member holder and a light receiver for

receiving the light emitted towards the cleaning member holder to determine whether the cleaning member holder holds the cleaning member on the basis of a fact that the light receiver has received the light emitted from the light emitter or not, the cleaning member holder being adapted to hold a cleaning member in a position where the light emitted from the light emitter impinges on a cleaning member held by the cleaning member holder.

5. A cleaning apparatus as set forth in claim 4, wherein the light receiver and the light emitter are positioned at opposite sides relative to the cleaning member holder so that the light emitted from the light emitter can reach the light receiver only when a cleaning member is not held by the cleaning member holder.

6. A cleaning apparatus as set forth in claim 4, wherein the light receiver is positioned to receive the light which is emitted from the light emitter and, thereafter, reflected by the cleaning member held by the cleaning member holder.

7. A cleaning apparatus as set forth in claim 2, wherein the sensor is provided on the cleaning member carrier to detect a presence/absence of the cleaning member held by the cleaning member carrier.

8. A cleaning apparatus as set forth in claim 7, wherein the cleaning carrier comprises a cleaning member holder, the sensor comprises a light emitter for emitting light towards the cleaning member holder and a light receiver for receiving the light emitted towards the cleaning member holder to determine whether the cleaning member holder holds the cleaning member on the basis of a fact that the light receiver has received the light emitted from the light emitter or not, the cleaning member holder being adapted to hold a cleaning member in a position where the light emitted from the light emitter impinges on the cleaning member held by the cleaning member holder.

9. A cleaning apparatus as set forth in claim 8, wherein the light receiver and the light emitter are positioned at opposite sides relative to the cleaning member holder so that the light emitted from the light emitter can reach the light receiver only when a cleaning member is not held by the cleaning member holder.

10. A cleaning apparatus as set forth in claim 8, wherein the light receiver is positioned to receive the light which is emitted from the light emitter and, thereafter, reflected by the cleaning member held by the cleaning member holder.

11. A polishing apparatus comprising a turntable having a polishing surface with which a substrate is brought into contact for polishing of the substrate and a cleaning device for cleaning the substrate, the cleaning device comprising:

a cleaning member;

a cleaning member carrier for holding the cleaning member and bringing the cleaning member into contact with the substrate; and

a sensor for detecting a presence/absence of the cleaning member held by the cleaning member carrier.

12. A polishing apparatus as set forth in claim 11, wherein the cleaning device further comprises a substrate holding device for holding the substrate, the cleaning member carrier is movable between a cleaning position where the cleaning member is brought into contact with the substrate held by the substrate holding device and a retracted position where the cleaning member is out of contact with the substrate.